

PATENT
02737.0004.NPUS01

PERSISTENT ARCHIVES

This application claims the benefit of U.S. Provisional Application No. 60/191,662, filed March 23, 2000, U.S. Provisional Application No. 60/255,795, filed December 15, 2000, U.S. Provisional Application No. 60/255,794, filed December 15, 2000, and U.S. Provisional Application No. ~~60/273,464~~ ~~Henry, DR. No.~~
~~02737.0007.P2US01~~, entitled "PERSISTENT ARCHIVES AND KNOWLEDGE-BASE PERSISTENT ARCHIVES," filed March 5, 2001, all of which are hereby fully incorporated by reference herein as though set forth in full. The U.S. Government has a paid-up license in this invention and the right in limited circumstances to require the patent owner to license others on reasonable terms as provided for by the terms of contract number F19628-96-C-0020 awarded by the Department of Defense.

BACKGROUND OF THE INVENTION

15 1. **Field of the Invention.**

This invention relates generally to the field of data archives, and, more specifically, persistent archives of collections of data objects.

2. **Related Art.**

The long-term storage and access of digital information is a major challenge. 20 The rapid change of technology resulting in obsolescence of archival storage media and database management systems, coupled with the very large volumes of data (terabytes to petabytes in size) involved, appears to make the problem intractable. A concern is that, when access to data in the archive is desired at some point in the future, the technology used to create the archive may be obsolete and unavailable, and 25 the technology existing in the future may not allow access to the data absent time-